

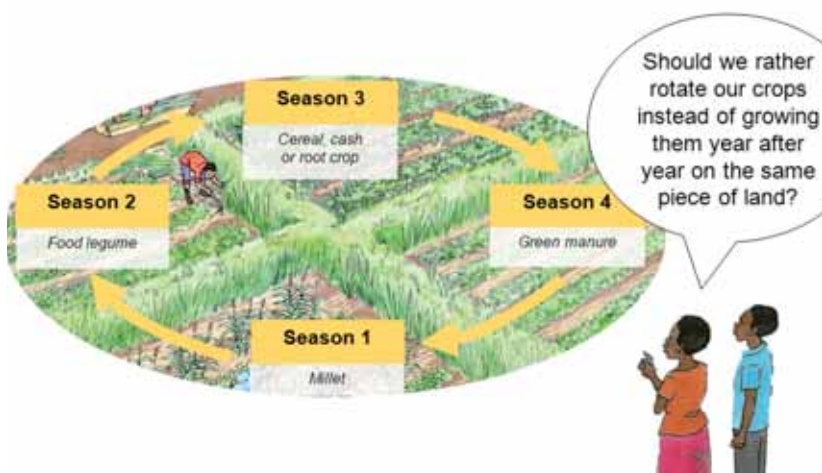
# GROWING MILLET THE ORGANIC WAY



Millet is known for its drought tolerance. Nevertheless, improved soil water and soil fertility management will result in much better and more regular harvests.

According to the International Federation of Organic Agriculture Movements (IFOAM, 2008) organic agriculture is «a production system that sustains the health of soils, ecosystems and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic agriculture combines tradition, innovation and science to benefit the shared environment and promote fair relationships and a good quality of life for all involved.»

## Diversify production for better yields



### Intercropping

- › increases diversity in the field;
- › increases productivity compared to millet grown alone;
- › reduces pest and disease pressure;
- › may however increase competition for water in dry areas

### Crop rotation

- › increases productivity of millet and fertility of the soil compared to monocropping of millet;
- › allows growing legumes at higher density;
- › provides good Striga control

## Adapt plant density to your conditions



- › The better the growing conditions, the higher the ideal number of plants per area
- › Wide between row distance allows the use of machinery for weed control
- › Small between row distance results in earlier ground cover and better weed suppression
- › On sandy soils, wider spacing allows plants to develop more lateral roots
- › Common plant distances are 10–45 cm by 45 cm for pure stands, or more when intercropped

## Improve crop nutrition

Compost made from animal manure and crop residues



Green manures

Since we started to protect the soil with mulch and improve its fertility and moisture with compost and green manures, our harvests have improved.



## Conserving soil

- › Build bunds along the contour lines to retain top soil
- › Plant hedges to slow down wind speed and soil loss
- › Cover the soil with mulch

## Improving soil fertility

- › Grow leguminous crops like cow-pea, pigeon pea or groundnut
- › Grow green manures like jack bean, perennial peanut or Mucuna that feed the soil

## Applying fertilisers to the soil

- › Regularly apply organic fertilisers like manures or compost
- › Apply permitted inorganics

## Manage weeds properly

Crop rotation with weed suppressing crops

Cultivars with good vigour at emergence and strong tillering

Adapt plant spacing for good weed suppression



Association of weed suppressing crops

Adapted plant spacing for good weed suppression

Soil cover with mulch

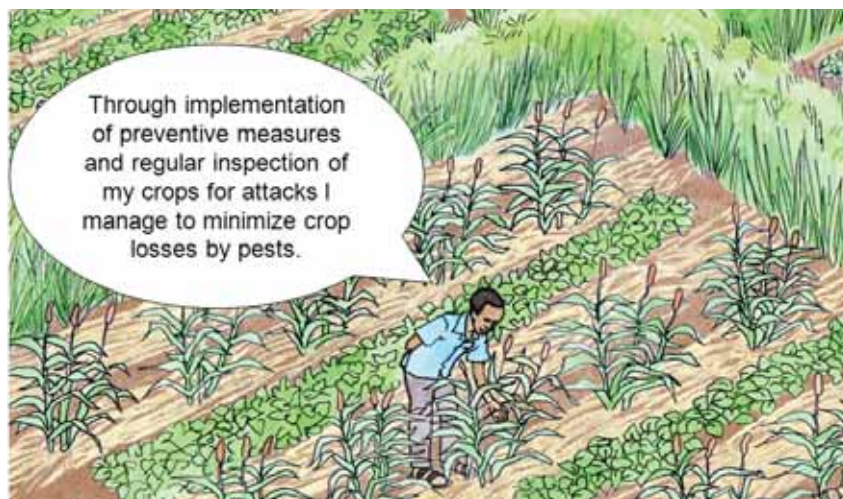
## Preventing weed propagation

- › Apply proper crop rotation
- › Use clean and weed-free seeds
- › Ensure good soil coverage for weed suppression
- › Control weeds around fields

## Controlling growing weeds in the field

- › Weed the crop a first time at latest 20 days after emergence
- › Weed a second time 10 to 15 days after first weeding
- › Remove Striga weed before it flowers
- › If it flowers before weeding, pull it out, heap and burn it

## Minimize infestations by pests



Through implementation of preventive measures and regular inspection of my crops for attacks I manage to minimize crop losses by pests.

## Limiting development of pests

- › Rotate millet with non-host crops to break pest life cycles
- › Select resistant or short cycle varieties, if available
- › Incorporate crop residues after harvest to kill remaining pests
- › Avoid staggered planting, if possible
- › Intercrop millet with other species to confuse the pests
- › Promote natural enemies with insect-feeding flower strips
- › Practice the push-pull method
- › Use pheromone-baited traps
- › Keep birds away from fields